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WHAT IS CLAIMED IS:

1. An electric door lock for a door panel, said electric door lock being operable in locking and unlocking modes, and comprising:

5 a lock housing adapted to be mounted on the door panel, formed with a handle mounting hole, and confining an accommodating space;

 a manual operating member mounted rotatably on said lock housing, said manual operating member having an operating
10 spindle that is disposed in said accommodating space and that extends through said handle mounting hole, and a manually operable rotary handle that is secured to one end of said operating spindle and that is disposed externally of said accommodating space;

15 a gear wheel sleeved rotatably on said operating spindle;

 a resilient actuating member having a securing portion secured to said operating spindle so as to permit co-rotation of said resilient actuating member with said
20 operating spindle, an abutting portion disposed adjacent to said gear wheel, and a resilient connecting portion extending from said securing portion to said abutting portion and urging said abutting portion toward said gear wheel;

25 an electric driving motor unit mounted in said accommodating space and operable so as to drive rotation of said gear wheel; and

a releasable coupling unit provided on said gear wheel and said abutting portion of said resilient actuating member for coupling releasably said gear wheel and said resilient actuating member;

5 said releasable coupling unit interconnecting said gear wheel and said resilient actuating member such that said resilient actuating member and said operating spindle rotate with said gear wheel when said electric driving motor unit drives rotation of said gear wheel;

10 said releasable coupling unit disconnecting said resilient actuating member from said gear wheel when a rotating force is applied directly to rotate said manually operable rotary handle of said manual operating member such that rotation of said resilient actuating
15 member with said operating spindle does not result in corresponding rotation of said gear wheel.

2. The electric door lock as claimed in Claim 1, wherein said releasable coupling unit includes a locking recess formed in one of said gear wheel and said abutting portion
20 of said resilient actuating member, and a locking protrusion formed in the other one of said gear wheel and said abutting portion of said resilient actuating member,

 said locking protrusion engaging said locking recess
25 when said electric driving motor unit drives rotation of said gear wheel, thereby permitting rotation of said resilient actuating member with said gear wheel,

said locking protrusion sliding out of said locking recess when the rotating force is applied to rotate said manual operating member, thereby disconnecting said resilient actuating member from said gear wheel.

5 3. The electric door lock as claimed in Claim 2, wherein said operating spindle of said manual operating member includes a first spindle portion connected to said manually operable rotary handle and extending rotatably through said handle mounting hole, and a second spindle
10 portion extending from said first spindle portion away from said manually operable rotary handle,

said first spindle portion being formed with a radial abutment shoulder proximate to said second spindle portion,

15 said gear wheel being sleeved rotatably on said second spindle portion,

said securing portion of said resilient actuating member being sleeved fittingly on said second spindle portion,

20 said abutting portion of said resilient actuating member biasing said gear wheel toward said radial abutment shoulder.

4. The electric door lock as claimed in Claim 3, wherein said abutting portion of said resilient actuating member
25 is annular and surrounds said securing portion, said resilient connecting portion of said resilient actuating member including a plurality of angularly

spaced apart ribs that extend in radial outward directions from said securing portion.

5. The electric door lock as claimed in Claim 1, wherein said electric driving motor unit includes a motor with
5 a transmission shaft, a worm wheel that is secured to said transmission shaft of said motor, and a transmission gear that is coupled to said worm wheel and said gear wheel.

6. The electric door lock as claimed in Claim 5, wherein
10 said resilient actuating member further has a switch actuating portion, said electric driving motor unit further including a switch device actuated by said switch actuating portion of said resilient actuating member when said electric door lock is in the locking mode.